

REQUEST FOR BIDS AND PROPOSALS BID REQUEST NO. 637-07

ONE REAR LOADER REFUSE COLLECTION VEHICLE FOR THE CITY OF ASHEVILLE PUBLIC WORKS DEPARTMENT

BID OPENING DATE: FRIDAY, AUGUST 4, 2006, AT 3:00 PM

ISSUED BY: CITY OF ASHEVILLE PURCHASING DIVISION P. O. BOX 7148

ASHEVILLE, NC 28802 PHONE: (828) 259-5950

NORWOOD R. DUNN, PURCHASING DIRECTOR

BIDS ARE TO BE SEALED AND MAILED TO THE ABOVE POST OFFICE BOX OR DELIVERED TO THE PURCHASING DIVISION OFFICE LOCATED AT NO. 3 HUNT HILL PLACE, ASHEVILLE, NC 28801

CITY OF ASHEVILLE, NORTH CAROLINA

PURCHASING DIVISION

Bid Request No. 637-07 Date: July 7, 2006

REQUEST FOR BIDS AND PROPOSALS ON

ONE REAR LOADER REFUSE COLLECTION VEHICLE FOR THE CITY OF ASHEVILLE PUBLIC WORKS DEPARTMENT

Pursuant to General Statutes of North Carolina, Section 143-129, as amended, sealed bids and proposals, subject to the conditions and specifications herein, are invited for furnishing the following equipment, materials, services or repair work. All bids will be received by the City of Asheville Purchasing Division until 3:00 p.m. on Friday, the 4th day of August, 2006, at which time they will be publicly opened and read.

TERMS:	Net 30 Da	ys		CITY	JF ASHEV	ILLE, N. C.	
DELIVERY:	ASAP - Bi	dder Specify Best Delivery	BY:	Norwo	od R. Dunr	n, Purchasing Di	irector
	BIDDERS: AI	POSITIVELY NO BIDS CONSIDERED UITED tax imposed upon any article on whice d. Failure to comply with these condition	ch you are bid	ding sh	all be show	vn as separate	items and in n
ITEM NO.	QUANTITY	DESCRIPTION			UNIT		EXTENSION
		ONE (1) REAR LOADER REFUSE COVEHICLE FOR THE CITY OF ASHEVI WORKS DEPARTMENT PER THE AT SPECIFICATIONS, TERMS AND CONDPAGE 6, ITEM NO. 9 - EXCEF SPECIFICATIONS OR ALTER DEADLINE FOR THE CITY'S DIVISION TO RECEIVE EXCE SPECIFICATIONS, ETC. IS BY FRIDAY, JULY 21, 2006.	LLE PUBLIC TACHED IDITIONS. PTIONS TO INATE BIDS. PURCHASING	THE G			CONTINUED
ADDRESS: _ CITY/STATE/ FEDERAL T <i>A</i>	ZIP: : XX I.D. NO.:		DATE: TELEP FAX N	ED: E PHONE: IUMBEF	1:		
EMAIL ADDE	ESS:						

CITY OF ASHEVILLE, NORTH CAROLINA

PURCHASING DEPARTMENT

REQUEST FOR FORMAL PROPOSALS

ITEM NO.	QUANTITY	DESCRIPTION	UNIT	UNIT PRICE	EXTENSION
A.	1	20-YARD REAR LOADER REFUSE COLLECTION VEHICLE FOR THE CITY OF ASHEVILLE PUBLIC WORKS DEPARTMENT PER THE ATTACHED SPECIFICATIONS, TERMS & CONDITIONS. RE: SPECIFICATION PAGE 12 THROUGH 26 BID: REAR LOADER			
		MFG'R: MODEL:			
		CAPACITY CUBIC YARDS CAB & CHASSIS			
		MFG'R:			
		YEAR: PACKER BODY			
		MFG'R: MODEL:	EACH	\$	\$
		YEAR:			
		DELIVERY WITHIN DAYS A.R.O.			

COMPANY NAME:	
SIGNED:	_TITLE:_

GENERAL CONDITIONS

- 1. All bids and proposals shall be for furnishing apparatus, supplies, materials, equipment and/or work and services in accordance with the applicable plans and specifications prescribed by The City of Asheville. From the date shown until the date of opening the proposals, the plans and specification of one proposed work and/or a complete, description of the apparatus, supplies, materials or equipment and/or work and services are an will continue to be on file in the office of the Director of Purchasing for City of Asheville, N. C., during usual office hours, and available to prospective bidders.
- 2. The City reserves the right to evaluate all bids especially where there is a wide range in specifications or to reject any and all bids and proposals, and further specifically reserves the right to make the award and/or awards in the best interest of the City of Asheville.
- 3. Time, in connection with discount offered, will be computed from date of delivery of the supplies or materials on delivery at destination when final inspection and acceptance are at those points, or from date correct invoice is received if latter is later than the date of delivery. Guaranteed maximum price must be shown in all bids.
- 4. In case of default of the contractor, the City may procure the articles or services from other sources and hold the contractor responsible for any excess cost occasioned thereby.
- 5. Payment by City due thirty days after delivery in Asheville and inspection unless otherwise specifically provided, subject to any discounts allowed.

BID

accepted within 60 days from the day	t for bids, and subject to all the conditions thereof, the u ate of the opening, to furnish any or all of the items upon wise specified, within days after receipt of order	on which prices are quoted, at the price set
will be allowed for prompt payment	s as follows: 10 calendar day, per cent; 15 ca	lendar days, per cent; 20 calendar
days, per cent; 30 calendar d	ays per cent.	
Bidder:	Address:	Zip:
By: (Authorized to sign bids)	Title:	
(Telephone Number:	
	Date:	
	NAME OF TAXABLE OF TAX	

MAILING INSTRUCTIONS

- 1. Bidder to submit a complete, fully executed bid document.
- 2. If mailed, bid should be forwarded by certified U. S. mail. Please address and mark your bid as shown below.

CITY OF ASHEVILLE, N. C.
PURCHASING DIVISION
P. O. BOX 7148
ASHEVILLE, N. C. 28802
BID REQUEST NO. 637-07
ONE REAR LOADER REFUSE VEHICLE
TO BE OPENED 3:00 O'CLOCK P.M.
FRIDAY, AUGUST 4, 2006

3. If forwarded other than by mail, delivery must be made directly to City of Asheville, Purchasing Division, No. 3 Hunt Hill Place, Asheville, North Carolina 28801.

NOTE: IF MAIL OR DELIVERY BY ANY OTHER MEANS IS DELAYED BEYOND THE DATE AND HOUR SET FOR BID OPENING, PROPOSAL THUS DELAYED WILL NOT BE CONSIDERED.

CITY OF ASHEVILLE PURCHASING DIVISION

SPECIAL TERMS AND CONDITIONS FOR OF ONE (1) 20-YARD REAR LOADER REFUSE COLLECTION VEHICLE FOR THE CITY OF ASHEVILLE PUBLIC WORKS DEPARTMENT

1. **<u>DETAILED SPECIFICATIONS</u>**: Detailed specifications for this equipment are included as an attachment with the bid request.

Bids to be submitted in accordance with the attached specifications and these Special Terms and Conditions, both of which require doing all that is necessary, proper, or incidental to the furnishing of the equipment identified herein. All things not expressly stated in the attached specifications or Special Terms and Conditions but involved in carrying them out must be included in bidder's proposal as though they were specifically stated.

- 2. NOTICE TO BIDDERS: All bids are subject to the provisions of the instructions to Bidders, special terms and conditions specific to this Invitation for Bids, the specifications, and General Contract Terms and Conditions. The City of Asheville objects to and will not evaluate or consider any additional terms and conditions submitted with a bidder response. This applies to any response appearing in or attached to the document as part of the bidder's response. DO NOT ATTACH ANY ADDITIONAL TERMS AND CONDITIONS. By execution and delivery of a proposal, the bidder agrees that any additional terms and conditions, whether submitted purposely or inadvertently, shall have no force or effect. It shall be the bidder's responsibility to read this entire document, review all enclosures and attachments, and comply with all requirements specified herein.
- 3. <u>ISSUING OFFICE</u>: This bid request is issued by the City of Asheville Purchasing Division, No. 3 Hunt Hill Place, P. O. Box 7148, Asheville, North Carolina 28802. All correspondence and inquiry should be made to this address.
- 4. CLARIFICATIONS/INTERPRETATIONS: Any and all questions regarding this document must be addressed to the City of Asheville Purchasing Division. Technical inquiries may be directed to the individual named herein. Any and all revisions to this document shall be made only by written addendum from the City of Asheville Purchasing Division. Therefore, no oral statements by any person shall modify or otherwise affect the terms, conditions, or specifications stated in Continued

this request for bids and proposals. The bidder is cautioned that the requirements of this bid can be altered only by written addendum and that verbal communications from whatever source are of no effect.

- 5. COMPLIANCE WITH RULES AND REGULATIONS: The equipment furnished must comply with all applicable provisions of the Occupational Safety and Health Act (OSHA), the American National Standard Institute (ANSI) and the Federal Motor Vehicle Standards of the U. S. Department of Transportation. The equipment furnished shall be capable of passing any applicable N. C. State motor vehicle inspection.
- 6. **GENERAL REQUIREMENTS**: The proposed equipment shall be current model year production and furnished complete and ready for use as required by the terms of these specifications.

The equipment furnished shall be the manufacturer's latest listed and published stock model, or models which meet all the applicable requirements of these specifications. Specifications may require that certain makes and models of vehicles, auxiliaries and/or accessories be provided.

All design, materials, and workmanship shall in every respect be in accordance with the best current practices in the industry and all materials used shall be new.

- 7. <u>TECHNICAL INQUIRIES</u>: Questions regarding specifications to be directed to Mr. Chris Dobbins, Fleet Manager, Monday through Friday, 8:30 a.m. 5:00 p.m. Telephone 828-259-5702.
- 8. <u>MINOR DEVIATIONS/EXCEPTIONS TO SPECIFICATIONS</u>: Minor deviations from the provisions of these specifications may be considered to permit manufacturers to follow their standard manufacturing processes; however, all proposed minor deviations must be explained in detail and submitted within the exceptions to specifications, time frame identified herein.
- 9. EXCEPTIONS TO SPECIFICATIONS OR ALTERNATE BIDS: In all cases equipment must be furnished as requested, and where brand names are used, consider the term "or equal" to follow. However, written approval for any proposed substitution or change in specifications must be obtained by bidder prior to the close of bids. Requests for approved equals, clarifications or changes in specifications, and/or protests of specifications must be received by the City of Asheville in writing, not less

than fourteen (14) days before the date of scheduled bid opening. Such requests should be mailed to City of Asheville, Purchasing Division, P. O. Box 7148, Asheville, North Carolina 28802. Mark envelope "EXCEPTIONS TO SPECIFICATIONS".

Any request for an approved equal, change in specification or protest of specifications must be fully supported with technical data, test results, or other pertinent information and evidence that the substitute offered is equal to, or better than, the specification requirement. In the event that clarifications or changes to bid specifications are necessary or if a proposed substitution is approved during the exception process, the City of Asheville will, if necessary, postpone the scheduled opening of bids so as to provide at least seven (7) days between the mailing of the amended bid specifications and the revised bid opening date.

Changes to specifications will be made by written addendum. Prospective bidders may make appointments to discuss these specifications. This, however, does not relieve prospective bidders from the requirement for a written request for clarification or change to the specifications.

Bidder's failure to request exceptions to specifications or approved equals as stated above will be interpreted as the bidders' intent to comply fully with the requirements as written. Conditional or qualified bids shall be subject to rejection in whole or in part.

The City of Asheville reserves the right to postpone bid openings for its own convenience.

- 10. **NONCONFORMING TERMS AND CONDITIONS**: A bid response that includes terms and conditions that do not conform to the terms and conditions in this bid document is subject to rejection as nonresponsive. The City of Asheville reserves the right to permit the bidder/vendor to withdraw nonconforming terms and conditions from its bid response prior to a determination by the City of Asheville of nonresponsiveness.
- 11. <u>BIDDERS SUBMITTALS</u>: Bidder must furnish all information requested herein including descriptive literature and/or complete specifications covering the products offered. Reference to literature submitted with a previous bid will not satisfy this provision. Bids which do not comply with these requirements will be subject to rejection. All documents submitted should bear the name of the bidder.

- 12. **EXPENSES INCURRED IN PREPARING BID**: The City of Asheville accepts no responsibility for any expense incurred by the bidder in the preparation and presentation of a bid. Such expenses shall be borne exclusively by the bidder.
- 13. <u>CONTRACT/AWARD</u>: Pursuant to the laws governing public contracts in North Carolina, the successful bidder's/vendor's response to this <u>Request for Bids and Proposals</u> and any addenda thereto, plus the City's issuance of a <u>City of Asheville Purchase Order</u> for the proposed goods and/or services shall constitute a binding contract.
- 14. **OPTION TO PURCHASE ADDITIONAL REQUIREMENTS**: Subject to the successful bidder's acceptance, the City reserves the option to purchase additional equipment as specified herein at the price bid and awarded in this Request for Bids and Proposals.
- 15. <u>INDEMNIFICATION</u>: The bidder/vendor covenants to save, defend, keep harmless, and indemnify the City of Asheville and all of its officers, departments, agencies, agents, and employees from and against all claims, loss, damage, injury, fines, penalties and cost including court costs and attorney's fees, charges, liability, and exposure, however, caused resulting from, arising out of, or in any way connected with the bidder's/vendor's negligent performance or nonperformance of the terms of the contract.
- 16. **ASSIGNMENT**: During the performance of the contract, the bidder/vendor shall not assign, transfer, convey, sublet, or otherwise dispose of any award or any or all of its rights, title, or interest therein, without the prior written consent of the City of Asheville.
- 17. **VENDOR APPLICATION AND PRIVILEGE LICENSE**: Bidders/vendors that have not previously submitted (within last 12 months) a vendor's application and/or privilege license should download an application from the City website at www.ashevillenc.gov and submit with their bid.
- 18. The vendor shall be responsible for seeing that any and all laws of the State of North Carolina concerning certificate of origin, title, transit or transportation documents, et al, are complied with in all respects.
- 19. Where reference is made to equipment to be "furnished" or "provided" by the bidder these words shall be read to mean suitably installed on each piece of equipment.

20. **VENDOR SUPPORT/SERVICE AND PARTS**: The vendor and/or manufacturer bidding on these specifications must describe in writing to be submitted with their bid, its ability to provide repair parts and technical service in the form of a service representative, including the maximum time from receipt of notice to arrival of parts or the service representative. The manufacturer, whether they are the vendor or not must be satisfactory to the City of Asheville from the standpoint of experience, reliability, and demonstrated ability to manufacture equipment comparable as to size and type as that required by the specifications, and shall have manufactured and sold equipment of the size and type specified which has operated satisfactorily in the field for a minimum of one year. The City of Asheville reserves the right to reject bids from vendors that have failed to perform satisfactory under previous contracts with the City of Asheville and/or vendors that cannot produce satisfactory evidence that they can furnish promptly all spare parts needed for ordinary service and repair of the equipment herein specified.

21. INSPECTION, TRAINING, PERFORMANCE TEST AND ACCEPTANCE:

- a. Upon delivery the equipment will be subject to inspection to verify conformance with specifications by the staff of the City's Fleet Management Division and the Public Works Department.
- b. Upon completion of the initial inspection and prior to performance testing by the City, the vendor will be required to conduct on-site technical training of City personnel in operation and maintenance procedures. Vendor must include in their bid any or all cost associated with providing this on-site training.
- c. Upon completion of on-site training the equipment may be required to undergo on route testing prior to acceptance. Performance testing will be performed by City personnel during regular scheduled work days.
- d. Any defects or failure of equipment to perform or comply with any requirements of the City specifications must be immediately remedied by the vendor at the vendor's own expense prior to acceptance by the City.
- 22. **INDEMNIFICATION**: The successful bidder/vendor agrees to indemnify and hold harmless the City of Asheville against any and all claims or causes of action for property damage or personal injury arising out of or relating to the negligence of the successful bidder/vendor, its officers, employees or agents during the test period for the operation of the vehicle prior to acceptance of the vehicle by the City of Asheville.

- 23. **WARRANTY**: Bidder to include the warranty provisions as outlined in bid specifications.
- 24. <u>TAX EXEMPTIONS</u>: The City of Asheville is exempt from Federal Excise Tax but not State and Local Sales Tax. Sales tax should not be included in bid prices, but may be added as separate items.
- 25. **SUBMITTALS**: Bidders to submit one (1) original bid package and one (1) complete copy.
- 26. <u>LEASE PURCHASE FINANCING</u>: Pursuant to N. C. General Statute 160-A-20, the City of Asheville may secure lease/purchase financing arrangements for some or all equipment proposed. All bids for the sale of this equipment must provide for payment by third party lease/purchase arrangements.
- 27. **EQUIPMENT DEMONSTRATION**: Each bidder shall be prepared to schedule a demonstration of the type of equipment proposed at a location mutually agreeable to the bidder and City staff members. The location should be within reasonable traveling distance from the City of Asheville and the City of Asheville shall be responsible for the travel expense of its staff members in attending any such demonstration. Equipment demonstration may be of vendor owned equipment or third party owned equipment at the discretion of the bidder.
- 28. **DELIVERY**: Delivery shall be made FOB: City of Asheville, Fleet Management Division, 173 South Charlotte Street, Asheville, North Carolina 28801. Bidder should give minimum seven (7) days notice of delivery of vehicles to Chris Dobbins, Fleet Manager. Telephone number 828-259-5702.
- 29. **COMMERCIAL GENERAL LIABILITY INSURANCE**: The successful bidder shall, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of commercial general liability insurance:

Products/Completed Operations Aggregate \$2,000,000
Personal and Advertising Injury \$1,000,000
Each Occurrence \$1,000,000

Coverage shall be written on a Commercial General Liability form and must include finished products/completed operations. The policy shall be written on an occurrence form and shall include Contractual Liability coverage.

The required limits can be provided by one or more policies provided all other insurance requirements are met.

Coverage shall be provided by a carrier(s) rated "Excellent" by A.M. Bests.

Within 14 days following notice of award, the successful bidder shall furnish the City of Asheville with a current Certificate of Insurance with coverages listed above. The certificate shall be made out to the purchaser and be an original, no photocopies shall be accepted. The Certificate of Insurance shall provide that the City be given 30 days advance notice of cancellation, nonrenewal or material change in coverage.

- 30. **EVALUATION AND SELECTION OF BIDS**: The evaluation of vendor bids shall center on the match between the stated specifications and other requirements included in the final bid request and the vendor's proposal including selection of the lowest responsible bidder, with consideration of past performance, service record, and reliability. The statutory provisions controlling purchasing by local governments in N. C. (GS 143) includes selection standards for use in making of awards. The provision reads, "All contracts shall be awarded to the lowest responsible bidder, taking into consideration quality, performance, and the time specified in the bids for the performance of the contract". The City of Asheville reserves the right to accept or reject any or all bids and proposals and further specifically reserves the right to make the award or awards in the best interest of the City of Asheville.
- 31. All bids shall be made firm for no less than sixty (60) days.

CITY OF ASHEVILLE PURCHASING DIVISION

ONE (1) 20-YARD REAR LOADER REFUSE COLLECTION VEHICLE FOR THE CITY OF ASHEVILLE PUBLIC WORKS DEPARTMENT

Minimum technical specifications for three (1) Rear Loader Refuse Truck to be used by the Public Works department, Sanitation Division. Unit shall be new, unused and manufacturer's latest production model. All Federal, State and OSHA requirements and standards shall be met.

NOTE: All bidders shall respond to each category below. **Any 'no' responses or deviations** shall be explained in the space provided:

C	One	SPECIFICATION (1) Rear Loader Refuse Truck	COMPLIES	<u>IF NO:</u> <u>DEVIATES AS</u> <u>NOTED</u>
1)	Ca	pacity		
	a)	The packer body shall have a capacity, excluding the receiving hopper, of not less than: 20 cubic yards minimum.		
	b)	The hopper shall have a capacity of three and nine tenths (3.9) cubic yards minimum.		
	c)	The structural integrity of the body shall allow high density loading of up to 1,000 pounds per cubic yard of normal refuse.		
	d)	Packing cycle time 16-18 seconds. Reload time 6-7 seconds.		
2)	Вс	ody Dimensions		
	a)	Maximum width, outside 96"		
	b)	Maximum overall length of the body and tailgate combined shall not exceed the following: 235 inches		
	c)			
	d)	Body height, inside 79"		
	e)	Body height, outside (above chassis) 96"		
3)		ody Construction		
	a)	The body interior shall have a smooth floor without a trough. The sides and roof shall also be smooth.		

BY:

COMPANY NAME:

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b)	In order to prevent damage from corrosion and fire, no hydraulic cylinders, valve or other hydraulic components shall come in contact with refuse packed into the body.		
c)	Body sides & roof shall be of curved stress skin construction interfacing with the corner mainframe bolsters. Rear bolsters shall be 5" x 20" formed channel @ the major upper & lower connecting points of the mainframe. Front bolster shall be a 5" x 8" formed channel @ the major upper & lower connecting points. All side wall and roof members shall be continuous welded.		
d)	Body roof shall be minimum 8 gauge, 80,000 PSI minimum yield hi-tensile steel sheet fully welded to a full length 11 gauge 50,000 PSI yield roof crown rail to contain and dissipate forces equally through the body structure.		
e)	Body sides shall be minimum 8 gauge, 80,000 PSI minimum yield high tensile steel sheet, fully welded to roof crown rail and to a 4.7" x 18" floor skirt rail.		
f)	Rear mainframe body side bolsters shall be a minimum 3" x 20" and contoured shaped to sidewall with, minimum 7 gauge 80,000 PSI minimum yield. Reinforcement bolsters shall be full welded to the curved body side sheets.		
g)	Body Floor shall be flat full width and must not have inboard guide rails or a trough. Floor shall be a minimum 7 gauge 80,000 PSI minimum yield steel sheet.		
h)	Floor longitudinals (long members) shall be a formed trapezoidal shape 9.6" x 11" with a 3.3" base sill of 7 gauge 80,000 PSI minimum yield formed steel channels and shall be continuous welded to the floor sheet.		
i)	Floor cross members shall be 3" x 6" x 7 gauge 80,000 PSI minimum yield steel channels. Cross members shall be interlaced through the long members on approximately 18" centers to fully support the floor. Cross members shall be full width, single piece.		
COME	PANY NAME:	RV·	

4)	Ta	ilgate Dimensions	
	a)	Maximum overall width at the hopper opening shall be 84 ½".	
	b)	Inside tailgate loading width shall be minimum of 80".	
	c)	Hopper opening height shall be minimum of 55".	
	d)	Loading sill height below chassis rail shall be 3.8" exclusive of any container handling mechanisms.	
	e)	Overall height above the chassis frame with the tailgate raised shall not exceed 207 ½".	
5)	Ta	ilgate Construction	
	ŕ	Tailgate sides shall be single piece 3/16" 150,000 PSI minimum yield 321 BHN abrasion resistant plate steel.	
	b)	Tailgate side reinforcement shall consist of 6" x 1 7/8" 11 gauge 50,000 PSE formed steel channels fully welded to the perimeter edge of the tailgate side sheets. An interlaced network of 6" x 1 7/8" 11 gauge 50,000 PSI and 6 5/8" x 1 7/8" 7 gauge 80,000 PSI minimum yield formed steel channels shall also be fully welded to the tailgate side for superior support.	
	c)	Hopper floor shall be minimum 3/16" 150,000 PSI minimum yield 321 BHN abrasion resistant steel plate.	
	d)	Hopper floor lateral reinforcement shall consist of a 3/16" 80,000 PSI minimum yield formed "Z" channel cross member. Forward hopper reinforcements shall be provided by a lateral network of 3/16" 80,000 PSI and 3/8" 50,000 PSI minimum yield formed steel channel cross members.	
	e)	Hopper front compaction face shall be minimum 5/16" 150,000 PSI minimum yield 321 BHN abrasion resistant steel plate.	
	f)	Tailgate shall be equipped with heavy duty 1" diameter turnbuckles, one on each side of body, to secure the tailgate in the closed position against the body to prevent leakage.	

COMPANY NAME: BY	•
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g)	Two (2) grab handles (3/4" hot roller steel bar) shall be located on each side of the tailgate for operator safety and comfort. One handle is to be mounted horizontally no less than 49" above the riding step. The other shall be mounted in the vertical plane, with the bottom edge no less than 44" above the steps. The latter shall also be attached to the rearward face of the perimeter of the tailgate reinforcement. (If unit is equipped with a container handling attachment, the latter will be omitted.)		
h)	The rear steps shall be bolt-on design fabricated from 12 gauge, 3 diamond Grip Strut, slip resistant, self-cleaning material. Located on each side of the tailgate, they shall provide for a minimum of 396 square inches of footing area for a single rider. The steps must conform to ANSI standards.		
i)	The tailgate shall be raised with two (2) single acting 4" bore x 26" stroke hydraulic cylinders. The cylinders shall incorporate an integral orifice which will limit the descent speed of the tailgate in the event of hydraulic failure.		
j)	The tailgate shall be equipped with a one piece, removable rubber gasket. The gasket, which shall have a durometer rating of 35-45 and tensile strength of 1500-1800 PSI shall extend across the entire bottom width of the tailgate and provide for water tight seal vertically up the side for no less than 21".		
k)	1 1		
6) Pa	80,000 PSI high tensile steel. acking Mechanism		
	Packing cycle control shall be mechanical, lever		
, a,	operated on the right hand side of the tailgate. A two lever design, the operator shall have the capability to start, stop and reverse the direction of any function at any time throughout the packing cycle.		
b)	Packing mechanism control valve shall be centrally located within the upper confines of the hopper, under upper light cross members.		
0014	DANY NAME:	RV.	

c) The packing cycle time shall be no greater than	
25-27 seconds. Operator reload time shall be no	
greater than 9-11 seconds.	
d) Packing mechanism shall consist of two primary	
structures, the upper packing panel and the	
packing blade.	
7) Upper Packing Panel	
a) The upper packing panel shall be mounted to the	
tailgate weldment with two (2) sets of upper and	
lower link arms. Each upper link arm shall be	
secured to the panel and tailgate with two (2) 2" diameter induction hardened C-1045 cold drawn	
steel pins. The lower link arms shall be	
connected to the tailgate with 2" diameter	
induction hardened C-1045 pins and to the panel	
with 2 5/16" heat treated, induction hardened	
4340 cold rolled steel hinge pins.	
b) The upper packing panel shall be constructed	
from 3/16" 150,000 PSI minimum yield, 321 BHN	
abrasion resistant steel plate in all areas of	
refuse contact. The packing blade hinge lugs	
shall be constructed from 3" thick 50,000 PSI	
minimum yield steel plate.	
c) Primary compaction by the upper panel shall be	
accomplished with two (2) double acting 5" bore x	
36" stroke hydraulic cylinders. Located outside of	
the hopper confines, the cylinders shall produce	
a minimum force of 73,600 pounds.	
d) Forward hinged side doors on each side of the tailgate shall provide access to the outside	
cylinders. The doors shall be easily opened	
without hand tools. The side doors shall prevent	
operator contact with the packing mechanism	
components as well as protect the components	
from the outside elements.	
8) Packing Blade	
a) The packing blade shall be mounted to and pivot	
on the upper panel hinge lugs with heat treated,	
induction hardened ASTM 4340 cold rolled 3"	
steel pins.	
COMPANY NAME:	BY:

b)	The packing blade shall be constructed with 3/16"		
	150,000 PSI minimum yield, 321 BHN, abrasion		
	resistant steel plate and capable of resisting		
	shearing and breaking forces of large objects		
	during the compacting cycle.		
c)	Pre-compaction by the packing blade shall be		
	accomplished with two (2) double acting, 5 1/2"		
	bore x 24" stroke cushioned hydraulic cylinders.		
	Located inside the hopper confines, the packing		
	blade cylinders shall produce a minimum force of		
	111,670 pounds (33.25 PSI).		
d)	All packing mechanism links shall have		
	replaceable hardened steel bushings for		
	extended service life. Wear shoes or rollers shall		
	not be acceptable in high compaction packing		
	mechanisms.		
e)	All cylinder and link pivot pins shall be kept in		
	place with minim Grade 5 retaining bolts, lock		
	nuts and lock collars.		
f)	Each hopper full of material shall be compressed		
	between the packing blade, upper panel and		
	ejector panel. The ejector panel shall be		
	automatically advanced by an ejector unload		
	valve. No operator attention shall be required to		
	advance the ejector panel as the body fills.		
g)	The packing mechanism shall be equipped with		
	an "automatic crowd" pressure sensing device,		
	which will enable the packing mechanism to find		
	a path through the load which will neither stall the		
	mechanism nor damage the structure thereby		
	prolonging the hopper floor and mechanism life.		
9) Dis	scharge of Load		
a)	The load shall be discharged by means of a		
	positive ejection system. A double acting,		
	telescopic hydraulic cylinder shall extend and		
	retract the ejector panel the full length of the		
	body. The ejector cylinder shall attach to the		
	body and the ejector panel via cold-drawn, C		
	1045, pins having a minimum diameter of 1 1/2"		
	and positioned diagonally to minimize possible		
	damage from objectionable liquids.		
b)	The ejector cylinder shall have the following		
	dimensional characteristics: 4 stages; 6" bore;		
	134.1 " stroke		
COMF	PANY NAME:	BY:	

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BY: _____

ŕ	from 11 gauge hi-tensile steel. Four (4) hi-tensile formed steel channels shall span horizontally, with one (1) trapezoidal cross member at floor level. The vertical panel corner posts shall be 0.375 hi-tensile steel. A 7 gauge hi-tensile steel protective covering shall be provided to keep refuse from coming in contact with the ejector cylinder.	
d)	the assistance of clamp bars or associated hardware.	
e)	body shall be achieved with two (2) cast alloy shoes on each side of the ejector panel. Shoe castings shall conform to specifications 28C358-A0201 possessing a minimum contact surface of 18 square inches each shoe side and having a minimum hardness of 260 BHN. Each shoe shall pivot on a minimum 2" diameter, C 1045, removable cold drawn stub pin held within the fully boxed 4" x 12" base frame of the ejector panel. Four (4) shoes shall be provided for each ejector panel and shoes must be replaceable without removing the ejector from the body. Rollers shall not be used.	
f)	Ejector guide bottom edge shall be located .375" above longitudinal floor corners. The guide channel shall have interior dimensions of 3/5" x 4.2". The top flange of the guide channel shall be reinforced with a 45° plate, which shall also serve as a self-cleaning device. The track shall also minimize pivotal movement of the ejector panel as refuse is packed against it.	
g)	Plastic (non-metallic) ejector shoe material is not acceptable.	
h)	The rod end of the ejector cylinder shall be pin mounted at the front of the body to the main lateral bolster of the body longitudinal members thus affording maximum resisting bending moment.	

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10)00	ontrols	
	The ejector panel and tailgate raise controls shall	
a)	be mounted outside the body on the front left	
	hand side of the body. Direct connection of the	
	control handles to the valve spool shall exist to	
	minimize moving parts and allow for ease of	
	service.	
b)	An electrical device shall be supplied to	
D)	automatically raise the engine speed to the	
	proper RPM during the packing cycle.	
c)		
C)	located at the front left hand side of the body	
	within hands reach of the ejector and tailgate	
	raise controls.	
۹)	Power take off controls shall be conveniently	
u)	mounted in the cab, preferably to right side of the	
	driver.	
11)Hv	rdraulic System	
	A heavy duty, high volume pump motive drive	
ω,	shall be a front engine crankshaft mounted	
	drive. The pump drive shall be activated by an	
	electrical overspeed shift system. provided and	
	shall The pump drive shall be activated by:	
	i) Electrical overspeed control Shift PTO	
	ii) Air Signal Air Shift PTO	
	iii) Mechanical Cable Shift PTO	
	iv) Front Engine Crank Driven Pump	
b)	The pump motive drive must run quietly. Gearing	
/	shall be selected for minimum engine RPM	
	compatible with recommended pump RPM for	
	correct operating pressure and rates of flow for	
	the refuse body.	
c)	To minimize hydraulic cylinder weight, a high-	
,	pressure hydraulic system shall be employed.	
	The operating pressure of the system shall be	
	2400-2500 PSI. Low-pressure systems shall not	
	be acceptable.	
d)	A heavy-duty gear pump shall be provided with a	
	rated capacity of 28 GPM at 1200 RPM.	
e)	The hydraulic pump shall be designated to	
,	operate continuously with peak loading at	
	frequent, short intervals.	
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f)	The hydraulic system shall incorporate adjustable		
	relief valves to protect all components from		
	excessive pressure and overloads.		
g)	All hydraulic tubes will be securely clamped to		
	prevent vibration, abrasion, and excessive noise.		
h)	All hydraulic tubes running the length of the body		
	shall be routed over the roof on the street side		
	bias of the body.		
i)	All hydraulic hoses shall conform to S.A.E.		
	standards for designed pressure. Bends shall		
	not be less than recommended by S.A.E.		
	standards. Flat spots in hoses will not be		
:\	acceptable.		
j)	All high-pressure hoses shall be sheathed with		
[6]	fabric protective covering. The hydraulic oil reservoir shall be frame		
k)	mounted underneath the body and shall have a		
	gross capacity of 50 gallons filled with hydraulic		
	fluid.		
1)	The tank shall be complete with a screened fill		
1)	pipe and cap, filter breather, clean out cover, and		
	shut off valve.		
m)	The hydraulic system shall be protected by a five		
111)	(5) micron return line filter along with a 100 mesh		
	(140 micron) reusable oil strainer in the suction		
	line.		
n)	The return line filter shall also include an in-cab		
,	filter by-pass monitor, which shall alert the		
	operator or service personnel when the filter is in		
	need of replacement.		
0)	All multi-spool control valves shall be of a section		
,	design such that servicing would not require		
	replacement of the entire valve assembly.		
12)Hy	draulic Cylinders		
a)	All cylinders must have a working pressure rating		
	of no less than 2500 PSI.		
b)	Inside packing cylinders must be of the internal		
	cushion design so that hydraulic shock and		
	audible noise is minimized. This shall be		
	accomplished by a design which will decrease		
	the speed of the cylinder for the last one-half		
	(1/2") inch of cylinder stroke on both directions of		
	travel.		
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c)	Rods of inside and outside packing cylinders	
	must be induction hardened to a surface	
	hardness of 55-65 Rockwell C scale.	
d)	Rods of all cylinders shall be chrome plated.	
e)	All packing cylinder end lugs shall be forged steel	
•	material.	
13)El	ectrical	
a)	All electrical wiring connectors to be automotive	
,	double-seal, with wiring in split convoluted loom.	
b)	All wiring connections to be soldered with rubber-	
,	molded covering or crimp type connectors with	
	shrink-wrap. Unprotected wiring in any	
	application is unacceptable.	
c)		
- /	impregnated to minimize effects of excess	
	moisture.	
14)Lic	ghting	
	Clearance, back up, and directional lights shall	
,	be Lexan lens, shock mounted in a protective	
	housing. The whole unit shall be pop out and	
	replaceable.	
b)	All lights shall be provided in accordance with	
,	FMVSS #108, ANSI Z245.1-1999 plus mid body	
	turn signals on each side of the body and a	
	center brake light on the rear.	
15)Pa	ainting	
	First Step – Smoothing - All weld slag, splatter or	
,	roughness shall be removed with the appropriate	
	hand tools. No sand, shot or glass air blasting	
	shall be permitted to eliminate contamination and	
	possible damage to bearings or pin surfaces and	
	possible distortion of higher gauge sheet	
	materials used on the body.	
b)	•	
۵)	wash shall drench the entire body with a highly	
	concentrated alkaline degreaser and emulsion	
	soap to clean all metal surfaces. This solution	
	shall soak through and break down the oil film	
	and other contaminants found on steel. The	
	solution shall be non-corrosive to metals and	
	shall be environmentally friendly.	
<u> </u>	Shall be environmentally menuly.	
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c) Third Step – Washing – The heated pressure		
washing shall thoroughly remove all soap		
residue. This process shall be completely safe to		
use on plastics, rubber, leather and fabric, and		
be safe on all metals. The solution shall be		
approved for all types of steel structures,		
machines, bodies, etc., where harsh		
environmental conditions are present.		
d) Fourth Step – Sealing – The entire body shall be		
coated with an application of the patented Dry-In-		
Place Seal from Henkel Surface Technologies.		
This process shall dramatically improve the		
surface finish's resistance to rusting that occurs		
from general wear and tear, and shall provide		
improvements to paint adhesion and other		
related corrosion that occurs over the life of the		
products. This shall help retain the "as new"		
appearance of the factory paint surface.		
e) Fifth Step – Primer Coat Paint – The seal coat		
shall be painted using Sikkens Autocoat LV		
epoxy primer or equivalent in an amount		
necessary to achieve a dry thickness of one (1)		
mil.		
f) Sixth Step – Finish Top Coat Paint – A high luster		
finish coat shall be applied using Sikkens		
Autocryl/acrylic urethane or equivalent. An		
ample amount shall be applied to achieve a dry		
thickness of two and one-half (2 ½) mil and shall		
result in a finish of 3 ½ mil minimum thickness		
and up to 4 mil maximum thickness.		
16)Lettering on Garbage Body		
a) Lettering may be painted or vinyl on two 8' X 3',		
14-gauge aluminum plates mounted on both		
sides of the body. Smooth sided garbage bodies		
of equivalent space may have the lettering		
painted or vinyl applied directly.		
b) Black 4-inch lettering will read as follows:		
City of Asheville		
Sanitation Division		
c) Green 6-inch lettering will read as follows:		
"Our Quality of Service, Your Quality of Life"		
d) Final approval of lettering layout required after		
award to the successful bidder.		
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17)Body Optional Equipment	
a) Dual Diamondback "Third Man" cart trippers with	
factory installed valve, plumbing and handles for	
dual tipper application. Cart tipper hydraulics to	
have quick disconnects for easy removal.	
b) Rear amber lens strobe light with in-cab control	
switch. Whelen brand required. Whelen amber	
strobe beacon part # 2022HP is acceptable.	
c) Heavy duty contractors package to include	
upgraded 1/4-inch steel plate hopper.	
18)Truck Chassis	
a) GVWR – 51,000 lbs minimum.	
b) Wheelbase, cab to axle and axle to end of frame	
overhang, dimensions are to be determined with	
the body supplier to result in the best possible	
weight distribution and to maximize the legal	
payload the truck can carry. It is the vendor's	
responsibility to design the unit and guarantee	
legal load limits and weight distribution using	
average weights under normal conditions.	
c) Cab - Forward tilt, cab-over engine with D.O.T.	
approved seating for three.	
i) Driver's seat air cushion, passenger seats	
standard offered. Driver and passenger seats	
to accommodate a total of three operators.	
Sun visors both sides.	
ii) HVAC – heater, defroster, fresh air ventilation	
and air conditioning.	
iii) Electric windshield wipers and washers with	
intermittent wiper capability.	
iv) Instruments with gauges for speedometer,	
odometer, tachometer, oil pressure, dual air	
pressure, voltmeter, engine water	
temperature and fuel.	
v) Engine Warning/Shutdown Device – Warning	
buzzer with separate lights for engine low oil	
pressure and engine high water temperature.	
Low air warning with audible and visible	
alarms.	

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vi) West Coast type mirrors, retractable, satin aluminum finish with manufacturer's standard arms. Both mirrors adjustable remote controlled and heated. Convex mirrors, clamp-on type, mounted both sides. vii) Horn – Air mounted below front of cab. viii) AM & FM Radio standard offered. ix) Color – Exterior white. Interior trim black or gray. x) D.O.T. Safety Kit to include a 20-lb ABC fire extinguisher, flares, and triangle reflector. d) Lighting – Must comply with all federal and state requirements. e) Frame – double channel, prime paint coated and top coated in black with (2) front-mounted tow hooks. Audible Back up Alarm. f) Fuel Tank – (1) Aluminum or stainless steel construction mounted on left or right side, 75-gallon minimum capacity. g) Front Suspension – Total spring axle rating is 16,000 lbs minimum with double-acting heavy duty shock absorbers. C.R. "Scotseal Plus" type wheel seals. h) Rear Suspension – Hendrickson tandem for refuse application with greasable bronze center bushings. Total spring rating is 40,000 lbs minimum. i) Rear Axle – Single speed, single reduction tandem rear axle with power divider. Power divider control mounted in the cab with a warning light and alarm indicating when the power divider is engaged. Unit shall be geared for a maximum highway speed of 60-62 mph. C.R. "Scotseal Plus" type wheel seals. j) Brakes – ABS i) Air compressor 13.2 CFM minimum with tank, Air dryer and automatic water separator/drain. ii) Front brakes – Meritor refuse service air type, 16.5" x 6" s-cam with automatic slack adjusters. Non-asbestos lining.		
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16.5" x 6" s-cam with automatic slack	tank. Air dryer and automatic water separator/drain.	
	16.5" x 6" s-cam with automatic slack	

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iii) Door broken Maritar refuse corning oir ture		
iii) Rear brakes - Meritor refuse service air type,		
16.5" x 7" s-cam with automatic slack		
adjusters. Non-asbestos lining.		
iv) Parking brake – Spring set on both rear axles.		
k) Wheels & Tires		
i) Front - 22.5" x 8.5" wheel, steel disc with		
pilot mount . Tire is 20-ply, tubeless radial		
with XYZ tread. Michelin & Goodyear		
considered equal. Specify size.		
ii) Rear – 22.5" x 8.25" wheel, steel disc with plot		
mount, Tire is 16-ply, tubeless radial with		
mud/snow XM+4 tread. Michelin & Goodyear		
considered equal. Specify size.		
I) Engine – Caterpillar Acert Technology C-7 300		
hp, 850 lb-ft torque minimum or equivalent.		
Peak torque rpm and % torque rise programmed		
for refuse truck use in a mountainous		
environment. <u>Caterpillar or Cummins engine</u>		
required.		
i) Two-stage air filter with safety element.		
ii) Full-flow spin-on oil filter.		
iii) Fuel filter with water separator & drain.		
iv) Engine block heater		
v) Front adaptor flange for front mounted PTO.		
vi) Coolant permanent, antifreeze protection to		
minus 40 degrees F.		
vii) Alternator is 130 amps rated minimum.		
viii)Exhaust is vertical, single muffler aluminized		
corrosion resistant material with a heat shield		
and rain cap.		
m) Transmission – Allison automatic 6-speed refuse		
service rated and matched to the engine		
application. Oil to water type oil cooler.		
n) Steering – Power assisted with adjustable tilt		
steering wheel.		
o) Batteries – (2) 12-volt maintenance free, 2,000		
CCA rated. Battery shutoff switch at battery box.		
19)Warranties - Vendor to supply all warranty		
statements applicable to the following requirements.		
All warranties cover 100% of all parts & labor.		
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Body manufacturer for a period of three years minimum.	
b) Engine for a period of three years minimum.	
c) Transmission for a period of five years minimum.	
 d) Truck chassis manufacturer for a period of two years minimum. 	
 e) All equipment not covered by the previous warranties shall be covered for a minimum of one year. 	
20)Service Facilities: The equipment/chassis	
manufacturer shall operate a service facility capable	
of performing repairs associated with the equipment	
they represent. This facility shall be located within 25	
miles of the City of Asheville, Fleet Management	
facility at 173 S. Charlotte St. The service facility	
shall be stocked with common replacement and high	
wear parts, as may be designated by the equipment	
manufacturer, and approved by the City of Asheville	
21) Manuals – All Units to have a one complete set of parts & service manuals when delivered.	
22)Training - Operator/mechanic training will be	
conducted at the customer's premises at no charge	
to the customer	
23) Acceptance – Prior to acceptance of this bid item	
and final payment of invoice, this bid item shall be	
checked against the above written specifications.	
The item offered for bid must meet or exceed these	
specifications as agreed to and stated by the vendor.	
24) Documentation - All required title licensing	
paperwork and a copy of the invoice must be with	
the vehicle at the time of delivery. Any missing	
paperwork at the time of delivery will result in	
delay of payment.	
25) Delivery F.O.B.: City of Asheville, Fleet	
Management, 173 South Charlotte Street, Asheville, NC 28801	
ING 2000 I	

CONSIDERATION GIVEN IN THE EVALUATION OF ALTERNATE BIDS FOR AWARD WILL INCLUDE HISTORICAL OPERATING COST/MILE DATA, DELIVERY CAPABILITY, LOCAL DEALER WARRANTY & SERVICE COSTS AND OTHER FACTORS ROUTINELY CONSIDERED IN BID EVALUATIONS.

COMPANY NAME: _	 BY:	

BID REQUEST NO. 637-07

ONE (1) 20-YARD REAR LOADER REFUSE COLLECTION VEHICLE FOR THE CITY OF ASHEVILLE PUBLIC WORKS DEPARTMENT